

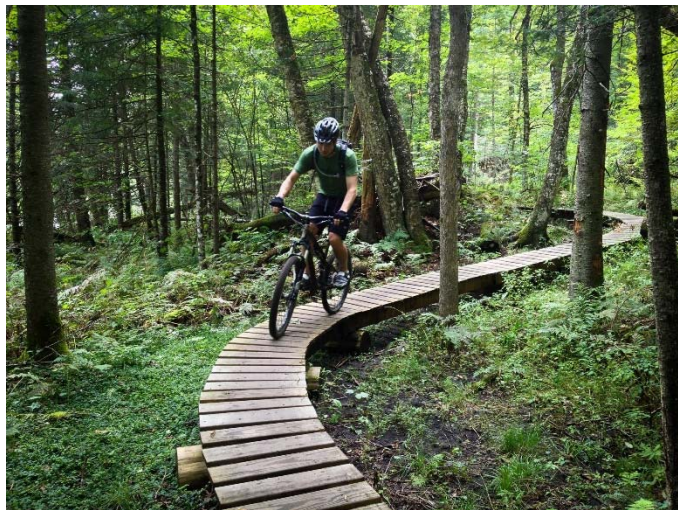
Building Trails and an Ethic That Lasts

Danielle Owczarski, Vermont Department of Environmental Conservation

A proposal for improvements to a mountain bike trail on public lands is passed out for review. Around the table sits an interdisciplinary team of scientists, land managers, and planners. A forester rules out impacts to harvestable timber, a wildlife biologist skims the map for a deer wintering yard, a fisheries biologist assesses stream crossings, and a natural communities ecologist looks for indications of the presence of rare plants while the water resource specialist and recreation managers look at erosion potential, trail sustainability of projected use, and resource goals of the property. They discuss their findings, weigh the pros and cons of the proposal, and make the decision to approve the trail upgrade.

This group of specialists is the one of the five Agency of Natural Resources (ANR) District Stewardship Teams, whose responsibility is to ensure that any proposed use of State lands managed by ANR meets high standards for natural resource protection, while also supporting the need for recreational and other land use opportunities. These regional teams develop plans, known as *long-range management plans*, that rely on a landscape analysis approach with inter-departmental review. Plans support many uses: sustainable timber management and recreational activities; wildlife habitat and species management; wildlife activities such as hunting and fishing; restoration and protection of water resources; protection of biodiversity and natural communities; and protection of historical and cultural resources. Developing these complex plans, taking into consideration myriad uses and public input, is no simple task.

As an avid mountain biker, hiker, and backcountry snowboarder, I take full advantage of Vermont's recreational resources. One of my favorite places to mountain bike, Perry Hill in Waterbury, is on state land. It is important to me both professionally and personally to encourage others to be aware of how they can both benefit and impact the water resources they depend on for drinking, fishing, canoeing, and swimming. Whether I am in the office or out on my bike, I'm always looking for opportunities to improve water quality and protect important public water resources. I can't help but notice the footer placement of a bridged



stream crossing on a bike trail. Will it result in accelerated erosion and that tell-tale hourglass shape? If so, how can we build better? Mountain biking is an ever-growing recreational use the District Stewardship teams evaluate and my role as a Watershed Planner is to review recreational projects through a lens of water resource protection and enhancement.



Watershed Planners understand the complexities of merging water quality protection and high-quality recreation. Most of the water quality protections on a local and national level were established due to the loss of functions that support recreation such as habitat for fisheries and clean water for drinking, paddling or swimming. Our job is to help people remember that their individual and communal actions can have an impact on the

services they've come to rely on and to help them protect and restore those services for future generations to enjoy.

One of the major hurdles for mountain biking in its formative years was erosion. Trails were built straight down the fall line resulting in the creation of new water courses and sedimentation into rivers and streams in headwater areas and productive fisheries. While some may miss the days of riding down rocky streambed-like trails on a shockless bike, I'm loving the new flow of sustainable trail building techniques that keep the rocks in place and shed water off the trail as quick as possible.

In the wake of recent flooding events such as Tropical Storm Irene and emerging water quality issues such as the algal blooms in Lake Champlain, the Stewardship Teams are giving ever more focus to water quality improvements and protection so that state lands will be a model for the rest of the state. In December 2015, [a new policy on Riparian Area Management on ANR Lands](#) was signed by the three department commissioners and the ANR Secretary. Since then, river scientists and watershed planners have become more involved with the District Stewardship Teams, identifying opportunities for water resource protection and restoration. And over the years watershed planners have worked with river scientists, local watershed groups, and landowners to protect hundreds of acres of riparian lands including headwater areas, river corridors, and swimming holes.

Although a state Watershed Planner's job is to coordinate and identify water resource projects and funding opportunities, local partners and landowners are a crucial spoke in the wheel to

protect our recreational gems. Organizations like the Lamoille Paddlers Trail, with the help of many dedicated community volunteers, recently built or upgraded six portage and access sites to withstand normal flooding events and resist erosion and sediment loss from river banks, with the added benefit of safer access points for the paddling community. By making outdoor recreational opportunities more accessible for locals and tourists to enjoy, we also deepen their connection to the resource. In doing so, we increase the odds of receiving support for long-term protection and maintenance.

It's easy, even for me, to overlook the complexity of the work that keeps our waters clean and enhances outdoor recreation. But that's the point isn't it – to create an experience that seamlessly balances the needs of the resource and the recreator. In the case of the Stewardship Team's decision and recommendations on the trail upgrade, the result was a safer, less erodible, and a super fun entry and exit section to the Perry Hill mountain bike trail system in Waterbury. I'm proud to belong to a group of dedicated professionals that can look holistically at recreation on state lands.

Danielle Owczarski is a Watershed Planner for the Vermont Department of Environmental Conservation. She lives in the mountainous terrain of Cambridge, VT with 3 dogs and her lovely husband and brother. When she isn't coordinating with communities and watershed partners on water quality improvement projects, she sews, meditates, reads a lot, mountain bikes and backcountry snowboards.



Old mountain bike trail on left and new trail on right.

Photo above and on front page courtesy of Brooke Scatchard and Mariah Keagy of Sinuosity - Flowing Trails at <http://sinuosity.net/>